Department of Water Resources
Levee Stability Program
A Seepage Repair at Reclamation District 404,
San Joaquin River, River Mile 42.1 To 42.3, Right Bank
Stockton, California

Mitigation Monitoring and Reporting Program

State of California
Department of Water Resources
Division of Flood Management
Levee Repair Branch

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INTRODUCTION

This document describes the mitigation monitoring and reporting program (MMRP) for ensuring the effective implementation of the mitigation measures for the Department of Water Resources Levee Stability Program, a Seepage Repair in Reclamation District 404, San Joaquin River, River Mile 42.1 to 42.3, Right Bank (proposed action). DWR is proposing to implement seepage remediation by constructing a cement-bentonite slurry wall through the existing levee that protects an urban residential area and State Highway 4 near the Garwood Bridge where it crosses the San Joaquin River. The proposed construction would remediate the seepage threat to complete the repair of a critically designated erosion site at RM 43.2 R. The waterside erosion repair work at the site was completed in 2008. If the proposed action is approved, this document will serve as a stand-alone general reference for the MMRP adopted by DWR.

The Construction of a Slurry Wall at San Joaquin River, River Mile 42.1 to 42.3, Right Bank identified in this MMRP is addressed in the June 2010 Draft Environmental Assessment/Initial Study (EA/IS) Mitigation measures to be implemented are identified in Table 1.

THE MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation is defined under both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) as a measure which:

- Avoids an impact by not taking a certain action or parts of an action;
- Minimizes an impact by limiting the degree or magnitude of an action;
- Rectifies an impact by repairing, rehabilitating, or restoring the affected environment;
- Reduces or eliminates an impact over time using preservation and maintenance operations throughout the life of the project;
- Compensates for an impact by creating or preserving substitute resources or environments, usually in-kind.

The legal basis for the development and implementation of the MMRP is found in both CEQA and NEPA. Under CEQA, California Public Resources Code (PRC) Sections 21002 and 21002.1 state that:

- Public agencies are not to approve projects, as proposed, if there are feasible alternatives or feasible mitigation measures available that would substantially lessen the significant environmental effects of such projects; and
- Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.

Also under CEQA, California PRC Section 21081.6 requires the following:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.

- The monitoring program must be adopted when a public agency makes its findings under CEQA so that the program can be made a condition of project approval in order to mitigate significant effects on the environment. The program must be designed to ensure compliance with mitigation measures during project implementation to mitigate or avoid significant environmental effects.

Under NEPA 40 Code of Federal Regulations (CFR) Section 1502.14f

- Public agencies must include appropriate mitigation measures not already included in the proposed action or proposed project alternatives.

The purpose of a MMRP is to ensure that measures adopted to mitigate or avoid significant environmental effects associated with a project are implemented. The MMRP is not only a working guide to be used to facilitate the implementation of mitigation and conservation measures by the project proponent, but also to ensure that monitoring and reporting requirements are met.

AUTHORITIES AND RESPONSIBILITIES

As the lead agency DWR is required to monitor implementation of the proposed action to ensure that the required mitigation and conservation measures are implemented. The purpose of the monitoring program is to document that the required mitigation measures are implemented as described in EA/IS documents. DWR has the authority to halt any activity associated with the proposed action if the activity is determined to be a deviation from the approved project or the adopted mitigation measures. DWR may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. DWR will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

IMPLEMENTATION AND COMPLIANCE APPROVAL PROCESS

The timing of mitigation measure implementation and subsequent approval of compliance is provided in Table 1, included at the end of this document.

SUMMARY OF MONITORING REQUIREMENTS

The EA/IS documents present and analyze potential environmental effects that would result from construction of the proposed levee repairs and identifies required mitigation measures, as appropriate. Based on the findings of the EA/IS document, the proposed action would have no impact or a less-than-significant impact on the following environmental features:

- Climate Change
- Aesthetics\Visual Resources
- Recreation

- Socioeconomics and Environmental Justice

The EA/IS documents determined that implementation of the proposed action would result in potentially significant impacts on the following environmental features. However, all potentially significant impacts would be mitigated to a less-than-significant level through the implementation of the measures identified in Table 1.

- Cultural Resources
- Vegetation and Wildlife Resources
- Special Status Species
- Hydrology and Water Quality
- Geology and Soils
- Air Quality
- Transportation
- Noise
- Hazardous, Toxic, and Radioactive Waste

Table 1 summarizes the required mitigation measures, and associated monitoring requirements for the proposed action. It also provides descriptions of the required timing for implementation, and the parties responsible for overseeing implementation of the various mitigation and monitoring items. Tables 1 will also serve as the record of verification of implementation.

RESOLUTION OF NONCOMPLIANCE COMPLAINTS

This MMRP is expected to reduce or eliminate most potential disputes concerning the implementation of the required mitigation measures. However, in the event that a dispute occurs, the following procedure will be observed:

- Any person or agency may file a complaint of noncompliance with any mitigation measure adopted under the proposed action. Complaints should be in written form and provide detailed information on the purported violation. The complaint shall be directed to DWR at the following addresses:

California Department of Water Resources
Attn: Mrs. Deborah Condon
Chief, Environmental Support Section
3464 El Camino Ave, Room 200
Sacramento, CA 95821
(916) 574-1426

DWR shall conduct an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure is verified, DWR shall oversee the necessary action(s) to remedy the violation. Written confirmation of the receipt of the complaint shall be provided

to the concerned party. This confirmation shall also include a response indicating the findings of the investigation and the corrective action taken (if warranted).

Table 1. Mitigation Monitoring and Reporting Program Measures at San Joaquin River Mile 42.1R to 42.3R

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
Cultural Resources (4.4.4)			
Impact CR-1: Implementation of the proposed action could cause a substantial adverse change in the significance of a historical or archaeological resource.			
***Mitigation Measure* CR-1:** a. Detailed investigation of levee cross-section and preparation of detailed levee plans for the section of levee to be degraded. Background historic research. Preparation of report to aid future evaluation of the San Joaquin River levee system.	Prior to initiating construction	DWR (implementation)	
Impact CR-2: Implementation of the proposed action could disturb or adversely affect undocumented cultural resources or human remains, including those interred outside of formal cemeteries.			
***Mitigation Measure* CR-2:** a. If cultural resources are encountered, work within 75 feet of the find shall be stopped until a qualified archeologist has evaluated the resources. The archeologist will make recommendations in conformance with PRC 5097.98.	During construction	DWR and/or Contractor (implementation)	
b. The County Coroner shall be immediately notified of the finding of any human remains. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify the most likely descendent. The most likely descendent shall complete a site inspection within 24 hours of notification and may recommend scientific removal and nondestructive analysis of the remains and associated Native American items.	During construction	DWR and/or Contractor (implementation)	
c. If prehistoric or ethnohistoric resources or human remains are discovered during construction, a qualified Native American monitor shall be retained to monitor any ground-disturbing activities in native soils or sediments.	During construction	DWR (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
Vegetation and Wildlife Resources (4.5.4) and Special Status Species (4.6.4)			
Impact BIO-1: Implementation of the proposed action could have substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or the USFWS.			
***Mitigation Measure* BIO-1:** a. The contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that will include a site restoration plan to revegetate with approved native seed mixtures. All areas below the top third of the waterside levee slope will be fenced off to protect existing vegetation.	Prior to initiating construction During construction	DWR (final design)	
b. All trees that are to be retained and that occur within the footprint of the repairs shall be trimmed by an International Society of Arboriculture certified arborist or other qualified personnel that are knowledgeable about tree biology and appropriate trimming procedures.	Prior to initiating construction During construction	Contractor (implementation)	
c. Construction staging and operation of vehicles/heavy equipment within the dripline of native trees shall be avoided to the greatest extent practicable.	During construction	Contractor (implementation)	
d. Any tree removal that is not specifically identified as authorized in the construction plans shall require individual authorization by DWR.	Prior to initiating construction During construction	Contractor (implementation)	
`Impact BIO-2: Construction of the slurrywall could substantially interfere with the movement of native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.			
***Mitigation Measure* BIO-2:** a. A qualified biologist shall conduct a pre-construction breeding season survey during the same calendar year that construction is planned to begin to determine if any birds are nesting on, or directly adjacent to, project site.	Prior to initiating construction	DWR (implementation)	
b. Where feasible, direct disturbance of any nest sites observed shall be avoided during the breeding season.	Prior to initiating construction	DWR and/or Contractor (implementation)	
c. Appropriate “no disturbance” buffers shall be established. The size and configuration of buffers shall be based on the	Prior to initiating construction	DWR and/or Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
proximity of active nests to construction, existing disturbance levels, topography, the sensitivity of the species, and other factors established through coordination with CDFG representatives on a case-by-case basis.			
d. Following nesting season, efforts will be made to preserve any trees used for nesting.	During construction	DWR and/or Contractor (implementation)	
Impact BIO-3: Implementation of the proposed action could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances.			
Implement Mitigation Measure BIO-1			
Impact BIO-4: Implementation of the proposed action could conflict with any provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.			
Implement Mitigation Measure BIO-1			
Impact BIO-5: Implementation of the proposed action could cause direct or indirect reduction in the growth, survival, habitat loss or reproductive success of species listed or proposed for listing as threatened or endangered under the Federal or State Endangered Species Act.			
***Mitigation Measure* BIO-5:** a. A qualified biologist will conduct WEAP training for construction crews (primarily crew and construction foreman) before construction activities begin. The WEAP training shall include a brief review of the special-status species and other sensitive resources that could occur in the project area, their legal status, and protection measures. The program shall also cover all mitigation measures, environmental permits and proposed project plans, such as the SWPPP, BMPs, erosion control and sediment plan, and any other required plans.	Prior to initiating construction	DWR (implementation)	
b. If an active nest of a sensitive avian species is identified onsite during preconstruction surveys, specific mitigation measures shall be developed in consultation with CDFG and USFWS. If possible, construction and maintenance may delay around individual raptor nests until after the young have fledged. Completion of the nesting cycle shall	Prior to initiating construction	DWR and/or Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
be determined by qualified ornithologist or biologist. Direct disturbance, including removal of nest trees and activities in the immediate vicinity of active nests, shall be avoided during the breeding season.			
c. If disturbance of the nest of a State-listed bird (i.e. Swainson's hawk, burrowing owl) cannot be avoided, the project applicant shall obtain a CDFG Section 2081 permit. If disturbance of any bird covered by the MBTA occurs, the project applicant shall consult with the USFWS and CDFG to determine appropriate mitigation measures.	During construction	DWR (consultation)	
d. Active nest trees that will not be removed, but are in close proximity to construction activities, shall be monitored weekly to determine if construction activities disturb the adult or young birds until the birds leave the nest. In the event that a previously unidentified nesting or roosting Swainson's hawk, or other raptor, is identified within the construction easement during construction, DWR will coordinate with CDFG to identify appropriate measures to ensure that these raptors are not adversely affected.	During construction	DWR and/or Contractor (implementation)	
e. If an active Swainson's hawk nest is found in the construction area, mitigation measures consistent with the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* shall be incorporated**.**	Prior to initiating construction	DWR and/or Contractor (implementation)	
f. If occupied burrowing owl burrows are identified on the site, impacts on the burrows shall be avoided by providing a buffer of 165 feet during the non-breeding season (September 1 through January 31) or 250 feet during the breeding season (February 1 through August 31). The size of the buffer area may be adjusted if a qualified biologist and CDFG determine it would not be likely to have adverse effects on the owls. No project activity shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 7.5 acres of foraging habitat contiguous to the burrow shall be maintained until the breeding season is over.	Prior to initiating construction During construction	DWR and/or Contractor (implementation)	
g. If impacts on occupied burrows are unavoidable, onsite	Prior to initiating construction	DWR and/or Contractor	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
passive relocation techniques approved by CDFG shall be used to encourage owls to move to alternative burrows outside of the impact area. No occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Mitigation for foraging habitat for relocated pairs shall follow guidelines provided in the California Burrowing Owl Consortium's April 1995 *Burrowing Owl Survey Protocol and Mitigation Guidelines*.		(implementation)	
h. Within 24-hours prior to commencement of construction activities, the site shall be inspected by a qualified biologist for any evidence of giant garter snake (*Thamnophis gigas)* presence. The monitoring biologist needs to be available thereafter; if a snake is encountered during construction activities, the monitoring biologist shall have the authority to stop construction activities until appropriate corrective measures have been completed or it is determined that the determined that the snake will not be harmed. The project area shall be re-inspected whenever a lapse in construction activity of two weeks or greater has occurred.	Prior to initiating construction During construction	DWR (implementation)	
i. Giant garter snakes encountered during construction activities should be allowed to move away from construction activities on their own. Capture and relocation of trapped or injured individuals can only be attempted by personnel or individuals with current Service recovery permits pursuant to section 10(a)1(A) of the Act. The biologist shall be required to report any incidental take to the Sacramento U.S. Fish and Wildlife Service by phone and by written letter addressed to the Chief, Endangered Species Division, within one working day.	During construction	DWR (implementation)	
j. A biological monitor shall be appointed by the DWR to be the point of contact for any worker that observes a dead, injured, or entrapped special-status fish. Dead or injured fish shall be photographed and the photographs provided to the DWR, NMFS, and USFWS. If a live specimen is captured in good condition, and a positive identification cannot be made in the field because of size or lack of	Prior to initiating construction	DWR (appoints monitor) Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
other distinguishing characteristics, the fish shall be immediately returned to the river downstream of the project area.			
k. A Cement-Benotine Spill Prevention and Emergency Response Hazardous Materials Management Plan shall be developed and implemented prior to initiation of construction. The plan shall include BMPs that would reduce the potential for spills of bentonite and other hazardous materials during construction. The plan shall include a specific protocol for the proper handling and disposal of materials and contingency procedures to follow in the event of a hazardous materials spill. The plan shall also describe the specific protocol for the proper handling and disposal of potentially hazardous materials that could be encountered during construction.	Prior to initiating construction	Contractor (implementation)	
Impact BIO-6: Implementation of the proposed action could direct or indirect reduction in the growth, survival, or reproductive success of substantial populations of Federal species of concern, State-listed endangered or threatened species, or species of special concern or regionally important commercial or game species.			
Implement Mitigation Measure BIO-5			
Hydrology and Water Quality (4.7.4)			
Impact WQ-1: Implementation of the proposed action could result in a violation of water quality standards or waste discharge requirements.			
***Mitigation Measure* WQ-1:** a. A SWPPP shall be prepared and implemented. The SWPPP shall include an erosion control plan, a water quality monitoring plan, a hazardous materials management plan, and BMPs for construction activities.	Prior to initiating construction	Contractor (implementation)	
b. BMPs shall be maintained until terrestrial areas disturbed during construction have been adequately revegetated and stabilized. Water quality monitoring, as detailed in the SWPPP, shall contain specific directives for establishing sampling locations and for acceptable levels of turbidity and settleable solids.	During construction	Contractor (implementation)	
c. Water quality monitoring, as detailed in the SWPPP, shall	During construction	Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
contain specific directives for establishing sampling locations and for acceptable levels of turbidity and settleable solids.			
d. Fuel and maintain vehicle in a specified area is designed to capture spills. This area cannot be near any ditch, stream, or other body of water or feature that may convey water to a nearby body of water. Inspect and maintain vehicles and equipment to prevent dripping of oil or other liquids.	During construction	Contractor (implementation)	
e. Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are scheduled to begin late summer 2010. If rains are forecasted during construction, erosion control measures would be implemented as described in the RWQCB Erosion and Sediment Control Field Manual.	During construction	Contractor (implementation)	
f. Project construction contractors shall obtain, and comply with, the conditions of a State General Construction Activity Stormwater Permit.	Prior to initiating construction During construction	Contractor (implementation)	
g. A Cement-Benotine Spill Prevention and Emergency Response Hazardous Materials Management Plan shall be developed and implemented prior to initiation of construction. The plan shall include BMPs that would reduce the potential for spills of bentonite and other hazardous materials during construction. The plan shall include a specific protocol for the proper handling and disposal of materials and contingency procedures to follow in the event of a hazardous materials spill. The plan shall also describe the specific protocol for the proper handling and disposal of potentially hazardous materials that could be encountered during construction.	Prior to initiating construction	Contractor (implementation)	
h. Any spills of hazardous materials to the river shall be cleaned up immediately and immediately reported to the Central Valley RWQCB, NMFS, and USFWS.	During construction	Contractor (implementation)	
Impact WQ-2: Implementation of the proposed action could create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.			

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
Implement Mitigation Measure WQ-1			
Impact WQ-3: Implementation of the proposed action could result in a degradation of water quality.			
Implement Mitigation Measure WQ-1			
Geology and Soils (4.8.4)			
Impact GS-1: Implementation of the proposed action could result in substantial soil erosion or the loss or topsoil			
***Mitigation Measure* GS-1:** a. A SWPPP shall be prepared and implemented. The SWPPP shall include an erosion control plan, a water quality monitoring plan, a hazardous materials management plan, and BMPs for construction activities	Prior to initiating construction	Contractor (implementation)	
Air Quality (4.9.4)			
Impact AQ-1: Implementation of the proposed action could violate applicable air quality standards.			
***Mitigation Measure* AQ-1:** a. Maintain properly functioning emission control devices on all vehicles and equipment	Prior to initiating construction During construction	Contractor (implementation)	
b. Use diesel-fueled equipment manufactured in 2003 or later, or retrofit equipment manufactured prior to 2003 with diesel oxidation catalysts	During construction	Contractor (implementation)	
c. DWR and/or other officials shall be authorized to conduct periodic site inspections to determine compliance.	During construction	Contractor (implementation)	
Impact AQ-2: Implementation of the proposed action could contribute substantially to an existing or projected air quality violation.			
***Mitigation Measure* AQ-2:** a. The contractor shall also monitor dust conditions along access roads and within the construction area to ensure that the generation of fugitive dust is minimized below the 50 µg/m3 24-hour threshold. Water sprays shall be applied to disturbed areas and soil stockpiles for dust control. Soil-disturbing activities shall be suspended during periods with	During construction	Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
winds over 20 miles per hour. Application of water would not be excessive or result in runoff into storm drains. Water or cover all material transported offsite to prevent generation of dust. Re-vegetate or pave areas cleared by construction in a timely manner to control fugitive dust			
b. To reduce O3 and PM10 levels, the contractor shall perform routine tuning and maintenance of construction equipment to ensure that the equipment is in proper running order.	Prior to initiating construction During construction	Contractor (implementation)	
c. Cover all trucks hauling dirt, sand, soil, or other loose material, or maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.	Prior to initiating construction During construction	Contractor (implementation)	
Traffic (4.10.4)			
Impact TR-1: Implementation of the proposed action could cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.			
***Mitigation Measure* TR-1:** a. A Traffic control Plan shall be prepared to be implemented during construction, which shall be monitored and approved by Caltrans and DWR. The contractor shall verify that all roads, bridges, culverts, and other infrastructure along the access routes can support haul vehicle loads. The traffic control plan shall include the intended haul route, location of signage, location of flaggers, approved permits, documentation of coordination with local and state agencies, and the location of potential traffic delays to vehicle and pedestrian traffic.	Prior to initiating construction	Contractor (implementation)	
Impact TR-2: Implementation of the proposed action could exceed, individually or cumulatively, a level of service (LOS) standard established by the county congestion management agency for designated roads or highways, or result in inadequate emergency access.			
***Mitigation Measure* TR-2:** a. The traffic management plan shall stipulate coordination with local police, fire, and emergency medical providers to	Prior to initiating construction	Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
advise these entities of the necessary temporary closure s.			
b. Maintain access for emergency vehicles at all times. Do not block driveways or any roadways; use flag personnel as needed to avoid conflict with construction vehicles or equipment; select haul routes to avoid schools, parks and high pedestrian use area; repair roads damaged by construction	During construction	Contractor (implementation)	
c. Contractor will repair roads damaged by construction activities.	During construction	Contractor (implementation)	
Noise (4.11.4)			
Impact NOI-1: Implementation of the proposed action could generate noise levels in excess of standards established by local general plans or noise ordinances, or applicable standards of other agencies.			
***Mitigation Measure* NOI-1:** a. Construction activities shall be limited to 6:00 a.m. to 8:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. Saturday.	During construction	Contractor (implementation)	
b. To the extent feasible, the contractor shall use newer construction equipment with noise control devices or retrofit older equipment to make it as unobtrusive as possible. c. A disturbance coordinator shall be designated and the person's telephone number shall be conspicuously posted around all project sites. The disturbance coordinator shall receive all public complaints and be responsible for determining the cause of the complaint and implementing any feasible measures to alleviate the problem	During construction	Contractor (implementation)	
Impact NOI-2: Implementation of the proposed action could generate excessive ground-borne vibration or noise.			
Implement Mitigation Measure NOI-1			
Impact NOI-3: Implementation of the proposed action could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity relative to levels existing without the project.			
Implement Mitigation Measure NOI-1			

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
Hazardous, Toxic, and Radioactive Waste (4.12.4)			
Impact HAZ-1: Implementation of the proposed action could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials into the environment.			
***Mitigation Measure* HAZ-1:** a. The contractor shall produce an Environmental Protection Plan, which shall include a contaminant prevention section that identifies potentially hazardous petroleum products and hazardous materials to be used on the site and a section on contaminant clean-up that includes methods and procedures for expeditious clean-up of potential spills.	Prior to initiating construction	Contractor (implementation)	
b. The construction contractor shall be required to prepare a Hazardous Material Control and Response Plan prior to construction	Prior to initiating construction	Contractor (implementation)	
c. All construction personnel shall be trained in the proper use and handling of fuels, lubricants, and other potentially hazardous materials and that each material is accompanied by a material safety data sheet.	Prior to initiating construction	Contractor (implementation)	
d. Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants, and oil shall be managed and stored in accordance with all federal, state, regional, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site each day that work is performed.	Prior to initiating construction	Contractor (implementation)	
e. The Contractor shall develop a Hazardous Materials Contingency Plan prior to delivery of any hazardous materials to the site. DWR appointed environmental monitor shall be notified immediately of any spill of petroleum products, organic or earthen materials, or any other potentially hazardous materials. The potential contamination shall be evaluated by a qualified professional and work in the vicinity shall not resume until appropriate remediation measures (if determined to be necessary) have been implemented. Appropriate remediation measures may include, but are not limited to, testing and evaluating the suspected areas, removal or treatment of contaminated soils, or capping the	Prior to initiating construction	Contractor (implementation)	

Mitigation Measure	Timing/Implementation	Responsible Parties (task)	Verification (date and initials)
contaminated areas with imported material.			
f. Solid wastes (excluding clearing debris) shall be placed in containers that are emptied on a regular schedule. Handling, storage, and disposal shall be conducted so as to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. All solid waste shall be transported from the construction site and disposed of in compliance with federal, state, and local requirements for solid waste disposal.	Prior to initiating construction	Contractor (implementation)	
g. Construction materials shall be free of HTRW. To alleviate the possibility that HTRW are released to the environment through these materials, the construction contractor shall have strict specifications for these materials and the supplier providing these materials shall provide certificates indicating these materials are free of HTRW	Prior to initiating construction	Contractor (implementation)	
h. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. No smoking shall be allowed in refueling areas.	Prior to initiating construction	Contractor (implementation)	
i. Equipment shall be inspected daily for oil and fuel leaks. Equipment found to be leaking oils or fuel shall be repaired immediately or removed from the job.	Prior to initiating construction	Contractor (implementation)	
j. The construction contractor shall comply with federal and/or state OSHA regulations, and other related fire and safety regulations.	Prior to initiating construction	Contractor (implementation)	
Impact HAZ-2: Implementation of the proposed action could create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment.			
***Mitigation Measure* MM HAZ-2:** a. If any undocumented hazardous waste is discovered during construction activities, construction shall stop and the proper local authorities shall be notified.	Prior to initiating construction	Contractor (implementation)	
Implement Mitigation Measure HAZ-1			